UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,205	07/24/2003	Puthukode G. Ramachandran	AUS920030501US1	9668

35525 7590 11/23/2007 IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380	**EXAMINER** PHAM, CHRYSTINE

ART UNIT	PAPER NUMBER
2192	

MAIL DATE	DELIVERY MODE
11/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 August 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Date. _____ .
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)		5) ☐ Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .		6) ☐ Other: _____ .

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set

   forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since

   this application is eligible for continued examination under 37 CFR 1.114, and the

   fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous

   Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

   submission filed on August 31, 2007 has been entered.

2. . This action is responsive to Amendment filed on August 31, 2007. Claims 1, 3,

   8, 13 and 18 have been amended. Claims 1-19 are presented for examination.

Information Disclosure Statement

3. Contrary to Applicants' remark that "an English translation of the abstract of

   reference JP 10260820A is included with the present response" (Remarks, page

   7, section II), no such English translation has been included in the present

   response. Thus, reference JP 10260820A remains unconsidered.

Response to Arguments

4. Applicant's arguments with respect to new claim limitations "to determine whether

   the new software module is known to function compatibly with existing set of

   software modules to form compatibility information", recited in at least claim 1,

   have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

6.   Claims 1-6, 8-11, 13-16 and 18-19 are rejected under 35 U.S.C. 102(e) as being

anticipated by Kroening et al. (US 6,735,757 B1, "Kroening").

Claim 1

Kroening teaches a method for testing the compatibility of software modules (see at

least *checking component compatibility, list of components, version/revision number,*

compatibility property col.2:24-36), the method comprising the computer-implemented

steps of:

- o responsive to receiving a request to install a new software module in a data

     processing system (see at least *405* FIG.4 & associated text), performing an

     inventory (see at least *120, 130* FIG.1 & associated text) on an existing set of

     software modules resident in the data processing system (see at least *425, 430*

     FIG.4 & associated text; *210, 230, 240* FIG.2 & associated text; *component 210,*

     component table, database, identification property 220, compatibility property

     240, version/revision property 250 col.3:13-38);

> o referring to a knowledge base of software modules to determine whether the new
>
>   software module is known to function compatibly with the existing set of software
>
>   modules to form compatibility information (see at least *conflicts, component, no*
>
>   *compatibility issues, installed 450* col.4:18-37); and
>
> o providing the compatibility information, wherein the compatibility information is
>
>   used to determine whether to install the new software module (see at least
>
>   *conflicts, component, no compatibility issues, installed 450* col.4:18-37; *435, 450*
>
>   FIG.4 & associated text).

Claim 2

The rejection of base claim 1 is incorporated. Kroening further teaches responsive to a

first selected user input, testing the new software module in a test data processing

system in combination with the existing set of software modules (see at least *testing,*

new version or revision, known compatibility issues, earlier revisions col.3:64-col.4:6);

and responsive to a second selected user input, installing the new software module in

the data processing system (see at least *testing, new version or revision, known*

compatibility issues, earlier revisions, installation col.3:64-col.4:6).

Claim 3

Kroening further teaches a method for testing the compatibility of software modules (see

at least *checking component compatibility, list of components, version/revision number,*

compatibility property col.2:24-36), the method comprising the computer-implemented

steps of:

- o responsive to receiving a request to install a new software module in a data

  processing system (see at least *405* FIG.4 & associated text), performing an

  inventory (see at least *120, 130* FIG.1 & associated text) on an existing set of

  software modules resident in the data processing system (see at least *425, 430*

  FIG.4 & associated text; *210, 230, 240* FIG.2 & associated text; *component 210,*

  component table, database, identification property 220, compatibility property

  240, version/revision property 250 col.3:13-38);

- o referring to a knowledge base of software modules to determine whether the new

  software module is known to function compatibly with the existing set of software

  modules to form compatibility information (see at least *conflicts, component, no*

  compatibility issues, installed 450 col.4:18-37); and

- o responsive to a negative determination, testing the new software module in a test

  data processing system in combination with the existing set of software modules

  (see at least *testing, new version or revision, known compatibility issues, earlier*

  revisions col.3:64-col.4:6).

Claim 4

The rejection of base claim 3 is incorporated. Kroening further teaches responsive to a

determination that the new software module is compatible with the existing software

modules, adding a new combination to the knowledge base (see at least *220, 240, 250*

FIG.2 & associated text; col.3:58-col.4:6); and installing the new software module in the

data processing system (see at least *450* FIG.4 & associated text).

Claim 5

The rejection of base claim 3 is incorporated. Kroening further teaches

- o responsive to a determination that the new software module is not compatible

   with the existing modules, searching the knowledge base to find a closest match,

   wherein at least one of the existing modules is removed or replaced with a

   different version (see at least *440, 450* FIG.4 & associated text);

- o prompting for the user as to availability of the closest match combination (see at

   least *440, 445* FIG.4 & associated text); and

- o responsive to a user input, installing the new software module and changing the

   existing modules as needed to obtain a compatible combination (see at least

   445, 450 FIG.4 & associated text).

Claim 6

Kroening teaches a method in a data processing system for monitoring software

combinations, the method comprising: identifying a software module (see at least *440*

FIG.4 & associated text); determining whether information is present for the software

module (see at least *445* FIG.4 & associated text); if information is absent for the

software module, installing the software module to form an installed software module

(see at least *450* FIG.4 & associated text); and testing the installed software module

(see at least *testing, new version or revision, known compatibility issues, earlier revisions* col.3:64-col.4:6);

Claim 8

Claim recites limitations, which have been addressed in claims 1 and 3, therefore, is rejected for the same reasons as cited in claims 1 and 3.

Claim 9

Claim recites limitations, which have been addressed in claim 4, therefore, is rejected for the same reasons as cited in claim 4.

Claim 10

Claim recites limitations, which have been addressed in claim 5, therefore, is rejected for the same reasons as cited in claim 5.

Claim 11

Claim recites limitations, which have been addressed in claim 6, therefore, is rejected for the same reasons as cited in claim 6.

Claim 13

Kroening teaches a computer program product in a computer readable medium for performing the method addressed in claim 3, therefore, is rejected for the same reasons as cited in claim 3.

Claim 14

Claim recites limitations, which have been addressed in claim 4, therefore, is rejected for the same reasons as cited in claim 4.

Claim 15

Claim recites limitations, which have been addressed in claim 5, therefore, is rejected for the same reasons as cited in claim 5.

Claim 16

Claim recites limitations, which have been addressed in claim 6, therefore, is rejected for the same reasons as cited in claim 6.

Claim 14

Claim recites limitations, which have been addressed in claim 4, therefore, is rejected for the same reasons as cited in claim 4.

Claim 15

Claim recites limitations, which have been addressed in claim 5, therefore; is rejected

for the same reasons as cited in claim 5.

Claim 16

Claim recites limitations, which have been addressed in claim 6, therefore, is rejected

for the same reasons as cited in claim 6.

Claim 18

Claim recites limitations, which have been addressed in claims 1 and 3, therefore, is

rejected for the same reasons as cited in claims 1 and 3.

Claim 19

Claim recites limitations, which have been addressed in claim 6, therefore, is rejected

for the same reasons as cited in claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kroening in view of Lau (US 2004/0128651 A1).

Claim 7

The rejection of base claim 6 is incorporated. Kroening further teaches wherein the
installing step comprises:

  o identifying an environment of a client in which the software module is to be

     installed (see at least *405* FIG.4 & associated text);

Kroening does not expressly disclose:

  o recreating the environment on a test data processing system; and

  o installing the software module on the test data processing system to form the

     installed software module.

However, Lau discloses a method and system for software interoperability testing (see
at least *118, 146* FIG.1 & associated text; *interoperability tests, new software tool,*
existing system software paragraph [0010]) comprising:

  o identifying an environment of a client (see at least *140* FIG.1 & associated text) in

     which the software module is to be installed (see at least *230* FIG.2 & associated

     text)

  o recreating the environment on a test data processing system (see at least *116,*

     110 FIG.1 & associated text); and

  o installing the software module on the test data processing system to form the

     installed software module (see at least paragraphs [0015]; [0023]; [0027];

     [0028]).

Kroening and Lau are analogous art because they are both directed to software

interoperability testing. It would have been obvious to one of ordinary skill in the

pertinent art at the time the invention was made to incorporate the teaching of Lau into

that of Kroening for the inclusion of recreating the environment on a test data

processing system; and installing the software module on the test data processing

system to form the installed software module. And the motivation for doing so would

have been to enable remote testing of software interoperability for multiple networked

computer systems prior to performing software migration (see at least Lau paragraphs

[0006]-[0009]; [0016]).

Claims 12 and 17

Claims recite limitations, which have been addressed in claim 7, therefore, are rejected

for the same reasons as cited in claim 7.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chrystine Pham whose telephone number is 571-

272-3702. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

        If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TUAN DAM
SUPERVISORY PATENT EXAMINER